

WHAT IS CLAIMED IS:

1. A thermal fixing device comprising:

a fixing member disposed to be in contact with a fixation medium;

5 a pressuring member disposed to face the fixing member and configured to press the fixation medium against the fixing member;

10 a conveying unit configured to convey the fixation medium that has passed through between the fixing member and the pressuring member;

a peeling member configured to be in contact with the fixing member; and

15 a separating member configured to separate the peeling member from the fixing member in a state where the separating member is in contact with the fixation medium that has passed through between the fixing member and the pressuring member.

2. The thermal fixing device as claimed in claim 1, wherein the separating member is configured to be in contact with the fixation medium held between the conveying unit and both the fixing medium and the pressuring member with a given tensile force.

3. The thermal fixing device as claimed in claim 1, wherein the peeling member and the separating member are separately formed.

25 4. The thermal fixing device as claimed in claim 1, wherein

the peeling member and the separating member are integrally formed.

5. The thermal fixing device as claimed in claim 1, wherein the peeling member is urged toward the fixing member by weight 5 thereof.

6. The thermal fixing device as claimed in claim 1, wherein the peeling member is swingably provided.

7. The thermal fixing device as claimed in claim 1, wherein the separating member comprises a contacting portion that 10 contacts the fixation medium and is formed by a curved surface.

8. The thermal fixing device as claimed in claim 1, wherein the peeling member comprises a guiding portion configured to guide the fixation medium that has passed through between the fixing member and the pressuring member to the conveying unit.

15. 9. The thermal fixing device as claimed in claim 1, wherein the peeling member comprises a tip portion configured to be in contact with the fixing member, and

wherein a width of the tip portion in a longitudinal direction of the fixing member is configured to be within a range 20 of from 0.5 mm to 1.5 mm.

10. The thermal fixing device as claimed in claim 1, wherein the peeling member comprises a tip portion configured to be in contact with the fixing member, and being formed substantially in wedge shape having a first surface facing the fixing member 25 and a second surface disposed opposite to the fixing member with

regard to the first surface,

wherein a first angle between a tangential line at a contacting point where the tip portion contacts the fixing member and the first surface is configured to be within a range of from 5  $0^\circ$  to  $45^\circ$ ,

wherein a second angle between a normal line at the contacting point and the second surface is configured to be not smaller than  $15^\circ$ , and

wherein a third angle between the first and the second 10 surface is configured to be not smaller than  $10^\circ$ .

11. The thermal fixing device as claimed in claim 1, wherein the peeling member is urged toward the fixing member by a force not larger than  $0.005 \times 9.8$  N.

12. The thermal fixing device as claimed in claim 1, wherein 15 the pressuring member comprises a plurality of pressuring members.

13. The thermal fixing device as claimed in claim 1, wherein the conveying unit is configured to convey the fixation medium at a speed not slower than a speed of conveyance of the fixation 20 medium by the pressuring member and the fixing member.

14. An image forming apparatus comprising:

a sheet feeding section configured to feed a sheet; and  
an image forming section configured to form an image on the sheet fed by the sheet feeding section,

25 wherein the image forming section includes a thermal fixing

device comprising:

a fixing member disposed to be in contact with the sheet;

a pressuring member disposed to face the fixing member and configured to press the sheet against the fixing member;

5 a conveying unit configured to convey the sheet that has passed through between the fixing member and the pressuring member;

a peeling member configured to be in contact with the fixing member; and

10 a separating member configured to separate the peeling member from the fixing member in a state where the separating member is in contact with the sheet that has passed through between the fixing member and the pressuring member.

15. The image forming apparatus as claimed in claim 14, wherein the separating member is configured to be in contact with the sheet held between the conveying unit and both the fixing medium and the pressuring member with a given tensile force.

16. The image forming apparatus as claimed in claim 14, wherein the peeling member and the separating member are separately formed.

20 17. The image forming apparatus as claimed in claim 14, wherein the peeling member and the separating member are integrally formed.

18. The image forming apparatus as claimed in claim 14, wherein 25 the peeling member is urged toward the fixing member by weight

thereof.

19. The image forming apparatus as claimed in claim 14, wherein the peeling member is swingably provided.

20. The image forming apparatus as claimed in claim 14, wherein 5 the separating member comprises a contacting portion that contacts the sheet contacts and is formed by a curved surface.

21. The image forming apparatus as claimed in claim 14, wherein the peeling member comprises a guiding portion configured to guide the sheet that has passed through between the fixing member 10 and the pressuring member to the conveying unit.

22. The image forming apparatus as claimed in claim 14, wherein the peeling member comprises a tip portion configured to be in contact with the fixing member, and

wherein a width of the tip portion in a longitudinal 15 direction of the fixing member is configured to be within a range of from 0.5 mm to 1.5 mm.

23. The image forming apparatus as claimed in claim 14, wherein the peeling member comprises a tip portion configured to be in contact with the fixing member, and being formed substantially 20 in wedge shape having a first surface facing the fixing member and a second surface disposed opposite to the fixing member with regard to the first surface,

wherein a first angle between a tangential line at a 25 contacting point where the tip portion contacts the fixing member and the first surface is configured to be within a range of from

0° to 45°,

wherein a second angle between a normal line at the contacting point and the second surface is configured to be not smaller than 15°, and

5 wherein a third angle between the first and the second surface is configured to be not smaller than 10°.

24. The image forming apparatus as claimed in claim 14, wherein the peeling member is urged toward the fixing member by a force not larger than 0.005 X 9.8 N.

10 25. The image forming apparatus as claimed in claim 14, wherein the pressuring member comprises a plurality of pressuring members.

26. The image forming apparatus as claimed in claim 14, wherein the conveying unit is configured to convey the sheet at a speed 15 not slower than a speed of conveyance of the sheet by the pressuring member and the fixing member.